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**Report on the Public Health Activities
of the City of Pawtucket with Recom-
mendations for their Improvement**

**PAWTUCKET BUSINESS MEN'S ASSOCIATION
DECEMBER, NINETEEN HUNDRED AND THIRTEEN**

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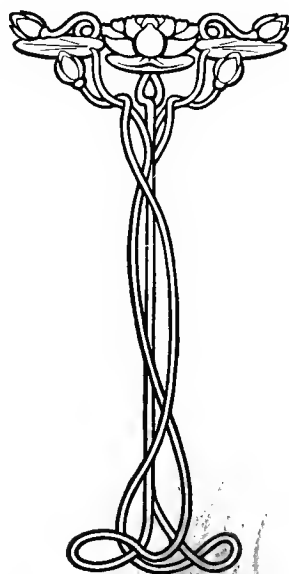
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Report on the Public Health Activities of the City of Pawtucket with Recom- mendations for their Improvement



PAWTUCKET BUSINESS MEN'S ASSOCIATION
DECEMBER, NINETEEN HUNDRED AND THIRTEEN

M. W.

REPORT OF COMMITTEE.

To the Pawtucket Business Men's Association:

GENTLEMEN—Your Special Committee on Public Health submits herewith its report.

Appreciating the immense importance of public health to a growing city like Pawtucket, and believing that in an investigation of the same best results could be obtained by engaging the services of an expert sanitarian, your committee called to its aid Prof. Selskar M. Gunn of Boston. Professor Gunn is assistant professor of public health at the Massachusetts Institute of Technology, lecturer on hygiene at Tuft's College Medical School, managing editor of the *American Journal of Public Health* and secretary of the American Public Health Association. He also has had wide experience in organizing public health work and has himself been a public health officer. His report, which is submitted herewith, is based on a study of local conditions. We believe it is impartial and worthy of your marked attention. We urge upon our city the adoption of the various recommendations which he makes, feeling sure that these recommendations, if put into operation, would place public health activities of this city on a surer and more scientific basis. The additional cost to the community of a modern health department will be of slight importance when compared with the benefits to be obtained. No city today can afford to do anything short of its best to protect the health of its citizens.

We desire to express our appreciation for the assistance given Professor Gunn by the Mayor of our city, the Board of Health and other officials connected with health work, also for the assistance and coöperation of the Society for the Relief and Control of Tuberculosis.

Respectfully submitted,

A. J. THORNLEY,	} Committee.
H. W. FITZ,	
ADAM SUTCLIFFE,	
J. A. TEEDEN,	
CHARLES P. HALL.	

REPORT ON THE PUBLIC HEALTH ACTIVITIES
OF THE CITY OF PAWTUCKET WITH RECOM-
MENDATIONS FOR THEIR IMPROVEMENT,
PRESENTED TO THE COMMITTEE ON
PUBLIC HEALTH OF THE PAW-
TUCKET BUSINESS MEN'S
ASSOCIATION.

To the Committee on Public Health:

GENTLEMEN—I beg, herewith, to submit for your consideration my report on the public health activities of the city of Pawtucket. Through the courtesies of his Honor the Mayor, the members of the Board of Health and their inspector and other city officials, I have been able to make a study of the work done in this city to preserve the public health and to prevent and curb the spread of preventable diseases. I wish to very heartily thank these gentlemen for their courtesies extended to me.

I wish it further to be understood that this report is not written with the idea of criticising any city official in the manner in which he is conducting his work. As far as I can see the officials of the city who are engaged in the various branches of health work are interested and desirous of doing their best to guard the city's health. That they are unable to do all that might seem desirable is to be accounted for by the facts that the health work of the city is very largely underfinanced and undermanned.

The health activities of the city of Pawtucket, unlike those in most cities, are not all included under one central health authority but are divided amongst a number of departments and independent officials.

Chart I shows the character of the present organization. It will be noted that milk inspection, meat inspection, plumbing inspection, care of vital statistics, vaccination, are all attended to by officials directly responsible to the Mayor and Board of Aldermen. They have no responsibilities with reference to the Board of Health. The Board of Health thus cannot be considered to be the central health authority dealing with all matters which affect the public health. The Board of Health consists of three members, the chairman, the clerk and the superintendent of health, the latter a member *ex-officio* on account of his also being city physician.

Chapter 19, Ordinances of the City of Pawtucket, revision of 1910, states that the city physician shall be a practising physician of the city and that he shall act as police surgeon, superintendent of health, and physician to the department of the poor. There are two officials connected directly

Public Health Activities

with the Board of Health; the superintendent of health and the sanitary inspector. The superintendent of health, who is also, as already indicated, police surgeon and city physician, in addition also serves as vaccinating physician, medical inspector of schools and maintains a private practice. The other official is the sanitary inspector, who is employed on a full time basis. His work consists largely in placarding cases of quarantinable disease, looking up of nuisances and complaints and general sanitary inspection.

The amount of money spent by the city of Pawtucket in 1912 on strictly health work was \$5,414.55. This was made up as follows:

PUBLIC HEALTH EXPENDITURES.

Pawtucket, 1912.

Salary, city physician.....	\$1,000.00
Salary of inspector.....	600.00
Abating nuisances.....	222.60
Fumigation.....	79.76
Janitor.....	21.50
Smallpox expense.....	184.00
Stationery and supplies.....	158.41
Printing.....	36.50
Sewer notices.....	13.00
Fitting up office.....	32.28
Miscellaneous.....	151.56
Furniture.....	20.85
Telephone.....	50.25
Tuberculosis day camp.....	403.33
Expenses to annual convention.....	150.00
Vaccinations.....	874.50
Milk inspector.....	500.00
Meat inspector.....	500.00
Expenses of milk inspector.....	416.01

Total expenditure.....	\$5,414.55
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This would indicate that the city of Pawtucket spent in 1912 approximately 10.4 cents per capita for health work.

In order to compare this with other cities in the same class as Pawtucket in the United States I append, herewith, a table showing the amount of money spent per capita by cities during 1912 for strictly public health work. This does not include any expense in connection with hospitals, street cleaning, garbage collection or disposal, plumbing inspection, etc., but straight health work.

Table showing population, total amount of money spent on health work, and per capita cost for 30 cities with population between 50,000, and 100,000.

	Population.	Money spent in Health work.	Per capita cost in cents.	
1	Yonkers,	79,000	45,099	.570
2	Springfield, Mass.,	88,000	39,985	.454
3	Tacoma,	83,000	28,045	.337
4	Lynchburg,	89,000	29,637	.333
5	Elizabeth,	73,000	23,068	.316
6	Covington,	53,000	16,000	.301
7	Hartford,	98,000	25,500	.260
8	Duluth,	78,000	20,000	.256
9	New Bedford,	96,000	22,500	.234
10	Wichita,	52,000	10,920	.210
11	Portland, Me.,	58,000	12,100	.208
12	Peoria,	66,000	13,500	.204
13	Brockton,	56,000	10,763	.192
14	Evansville,	69,000	13,200	.191
15	Somerville,	77,000	14,300	.185
16	Mobile,	51,000	9,000	.176
17	E. St. Louis,	58,000	10,000	.172
18	Springfield, Ill.,	51,000	8,335	.163
19	Erie,	66,000	10,365	.157
20	Waterbury,	73,000	11,000	.150
21	Harrisburg,	64,000	9,118	.142
22	Kansas City, Kan.,	82,000	10,000	.121
23	Trenton,	96,000	11,575	.120
<hr/>				
24	Pawtucket,	51,000	5,414	.104
<hr/>				
25	Reading,	96,000	9,500	.098
26	Camden,	94,000	8,965	.095
27	Altoona,	52,000	4,330	.083
28	Bayonne,	55,000	3,100	.056
29	Hoboken,	70,000	2,600	.037
30	South Bend,	53,000	2,000	.037

Figures supplied through courtesy of Mr. Franz Schneider, Jr., of the Russell Sage Foundation, N. Y.

In this table it will be noted that of the thirty cities with populations of 50,000 to 100,000, Pawtucket stands twenty-fourth in the list; only Reading, Pa., Camden, N. J., Altoona, Pa., Bayonne, N. J., Hoboken and

South Bend, showing smaller amounts per capita spent on health work. It has been suggested that cities ranging from 30,000 to 50,000 in population should have a minimum per capita cost of 50 cents for health work; cities ranging from 50,000 to 100,000 a minimum of 75 cents, and larger amounts for the still larger cities. While different communities must necessarily have different needs and consequently require varying amounts, I have no hesitation in saying that the public health activities of Pawtucket are very much underfinanced and the officials are to be congratulated on what they are doing with their small appropriations. They are certainly underpaid. Pawtucket, a city of 55,000, should certainly pay much more attention to the public health.

It is perfectly true that a study of the death statistics of the last few years does not reveal an undue prevalence of communicable disease. The appended tables give the information for measles, whooping-cough, scarlet fever, diphtheria, typhoid fever, tuberculosis and pneumonia for Pawtucket, for Rhode Island, and for the registration cities of the United States from 1900 to 1911. These indicate in a general way the fact that Pawtucket is a good deal better off than the average registration city and, as a rule, has a better record than the state of Rhode Island as a whole. Nevertheless, a study of the deaths which are reported indicates that there is room for much improvement. Many persons are dying every year from causes recognized as preventable. The tuberculosis and infant mortality situations alone indicate the great opportunities of health officials of the city.

CONTROL OF COMMUNICABLE DISEASE.

The methods used in this city in attempting to control the common reportable diseases are very simple. The physicians report the cases to the superintendent of health, usually by telephone, and he notifies the sanitary inspector, who visits the cases of scarlet fever and diphtheria, placards the house, and gives directions for isolation of the patient. The premises are usually not reinspected until the time for release. Scarlet fever cases are released from quarantine in from two to four weeks without inspection, and diphtheria cases are released, without either inspection or cultures from the throat and nose, one week after the attending physician reports that the throat is clear. The school authorities are notified of the cases of communicable disease. Milk dealers are not informed.

The typhoid fever rate of the city is most excellent. This is, doubtless, due to the fact that the city has a pure water supply. Undoubtedly the splendid work of the Board of Health in insisting on the abandonment of privy vaults has also been of assistance. It is estimated that there are still 110 to 115 houses located on streets with sewers, which are not yet connected.

There is no record of the privies located on streets which are without

sewers as yet and the sanitary inspector states that such privies are not under regular inspection, as he has no time to devote to this work.

TUBERCULOSIS.

The law of Rhode Island requires physicians to report all cases of pulmonary tuberculosis to the State Board of Health. This board maintains a tuberculosis register and informs the District Nursing Associations of cases, when permission to do so is granted by the reporting physician for the purpose of visiting. The State Board of Health does *not* notify the local health authorities of the cases and, indeed, believes that the state law does not give them such authority. In my opinion it is of small value to have physicians report cases of tuberculosis to the State Board of Health. The proper persons to receive reports of cases of this disease are the local health authorities. What good is done by a knowledge of the fact that the cases of tuberculosis in Pawtucket are entered in a register at the state capitol, while the local health authorities remain in ignorance of them and in fact cannot be notified by the State Board of Health because the law does not permit it!

Pawtucket could require an independent report of all cases of this disease, as is done in Providence. This would require a physician to report a case twice, once to the State Board and once to the local Board of Health. This seems both unfair and unnecessary, and, as the local health board should do the actual work of disease prevention, the reports should be made to it.

In the 1912 report of the Board of Health are given the following deaths from tuberculosis:

Pulmonary	55
Tubercular meningitis	14
Tubercular peritonitis	2
Miliary tuberculosis	1
	—
Total	72

Estimating five cases for each death, a frequently accepted ratio, it would indicate that there were at the present time approximately 350 cases of this disease in the community.

Tuberculosis is recognized as being one of the big problems of the health authorities. Nothing is done by the Board of Health. Its hands are pretty effectively tied by the law and lack of funds. The prevention of this disease is a complex problem. The importance of education of those sick with the disease is well recognized and this work is best done by public health nurses. I feel that there is a serious need for a complete revision of the methods of dealing with this disease in Pawtucket. In the first place

steps should be taken to have the physicians report their cases direct to the local health authorities, and then in *all* cases where education is needed, a tuberculosis nurse should visit. Disinfectants, sputum cups, etc., should be distributed by the Board of Health through its nurses. Free antitoxin is to be obtained to *cure* a case of diphtheria, why should not such supplies as will assist in *preventing* tuberculosis be distributed free to all sufferers?

The District Nursing Association is doing some work in visiting cases of tuberculosis. This should be done and paid for by the health department. A city the size of Pawtucket should be well able to pay for the services of public health nurses, not only for work in tuberculosis but in other lines, notably infant mortality.

The city has already recognized its obligation to look after cases of tuberculosis by appropriating \$500 for a tuberculosis day camp. It should recognize that its duty is of a much more extensive character in connection with this disease and give the Board of Health sufficient funds and powers to do real preventive work. Mr. Hall informs me authoritatively that one-third of the applications to the Associated Charities are brought about through sickness and that one-half of all these are on account of tuberculosis. Truly the situation is one demanding immediate attention. The problems of scarlet fever and diphtheria are dwarfed when compared with the tuberculosis situation.

DISINFECTION.

Disinfection by means of formaldehyde gas is performed after cases of scarlet fever and diphtheria, etc. Needless to say, premises are not regularly disinfected after death or removal in the case of tuberculosis. The District Nurses Association notifies the Board of Health of the removal of advanced cases and death so that disinfection can be performed. This, of course, is incomplete. It is generally conceded that there is need of a thorough cleaning and disinfection after the disease. In some states a complete renovation of premises is required. Ordinary disinfection with formaldehyde gas is probably of little value under any circumstances, but real cleansing is demanded by the best practice after cases of tuberculosis. The Board of Health is, of course, unable to do this, even if it desires to, if the location of the cases are not known.

INFANT MORTALITY.

The prevention of needless deaths among infants is one of the large problems of public health work and one in which results can be obtained with considerable ease. The Board of Health of Pawtucket has no regular program in this direction. The appended table indicates that there are a large number of deaths under one year of age. These deaths are in many cases absolutely avoidable. The necessity of clean, pure milk for

babies has been demonstrated. This requires the best kind of inspection and examination of milk. Pawtucket is certainly away behind the times in this matter.

INFANT MORTALITY.

PAWTUCKET.

	Total Deaths all ages.	Deaths under 1.	Per cent.
1905	725	164	22.5
1906	718	155	21.6
1907	841	181	21.6
1908	727	154	22.6
1909	757	179	22.3
1910	826	191	23.1
1911	830	174	22.2

As far as I can learn, the only regular work being done in the city to prevent needless infant deaths is that of the nurse or infant work of the Associated Charities. Direct education of mothers by competent public health nurses is probably the most important factor in preventing unnecessary sickness and deaths. The Board of Health should take over and develop the work now being done by the Associated Charities in this direction. It is health department work and is recognized as such in many communities. It is becoming a very well recognized practice for health boards to have nurses for this work. They are kept in touch with all births reported and can immediately take steps to reach mothers and infants. This kind of effort is real public health work and any modern sanitarian will bear evidence to this effect.

SANITARY INSPECTION.

Practically all of the sanitary inspection is done by the one sanitary inspector. A complaint book is kept and all complaints are entered and inspected. Notices are served on persons maintaining nuisances and, on the whole, good results are obtained in having them abated. The inspector states that he has no time to make routine inspections to locate conditions contrary to the sanitary ordinances and this is self-evident when it is remembered that his duties are numerous, and his territory a large one to cover. He is certainly doing his best and is no shirker. There should be at least three full-time inspectors for a city the size of Pawtucket. It is well recognized that many objectionable conditions are never complained of to the health authorities. A constant sanitary patrol is demanded and this is impossible unless the staff is sufficiently large. The need for constant inspection of the housing conditions is evident.

MILK INSPECTION.

The milk inspector is a part-time official who receives the salary of \$500 a year. He informed me that there are about seventy-five dealers

selling milk in the city of Pawtucket and over 200 stores where milk is handled. He also estimates that 250 dairies supply milk to the city. The report of the work done by him during 1912, as taken from the annual report of 1912, is as follows:

Total number of licenses.....	250
Dealers.....	62
Stores.....	198
Tests for milk.....	57
Visits to stores.....	58
Visits to farms and dairies.....	58

This report indicates very completely that the Pawtucket milk supply is not receiving the attention which it should and which modern sanitary practice demands. It is evident that a very large number of the dairies supplying milk to the city are not visited at all. The tests for milk consist essentially of the routine Babcock test for butter fat. No tests of any kind are made with regard to the cleanliness of the milk. It is very certain that the whole milk inspection is inadequate and is certainly very far below what it should be in a city of the size and importance of Pawtucket. The milk inspector does not pay any attention to other dairy products as this is largely the function of the state food and drug commissioner.

The milk inspector is not under the health department but is appointed by the Mayor and Board of Aldermen. This is a curious and unusual situation. Milk is one of the most important of foodstuffs, and probably more important from the public health point of view than all other foods considered together. It is of particular danger on account of the fact that it is so readily contaminated and generally consumed in a raw state and used so extensively for the young.

It is evident to me that there is need for a full-time milk inspector; there is need for better laboratory facilities, especially those which would make it possible to examine milk bacteriologically. Many cities of much smaller size and importance than Pawtucket have established such laboratories and have found them of the utmost importance in insuring a clean and sanitary product.

The milk inspection should be turned over absolutely to the Board of Health. In order to do this, it will require a special enabling act of the legislature similar to that passed for Newport (Chapter 616, Acts of 1910, Amended Chapter 754, Acts of 1911). This act not only transferred all milk inspection to the Board of Health, but also gave the Board of Health all control over meat inspection, slaughter-house inspection, etc. This is also desirable in the case of Pawtucket. I cannot see any particular difficulty to getting the legislature to pass an act for Pawtucket similar to that adopted for Newport.

MEAT INSPECTION.

There is no report of the work done by the meat inspector in the annual report for 1912. This position is a part-time position. The meat inspector is appointed by the Mayor and Board of Aldermen and is in no way responsible to the Board of Health. He also does a certain amount of work on fish inspection. This work should be transferred *in toto* to the Board of Health (see under Milk Inspection).

CARE OF RECORDS OF VITAL STATISTICS.

Vital statistics are the measure of sanitary science. The health department is keenly interested in them and must refer constantly to them, if the work is to be carried on efficiently. All deaths from communicable disease must be immediately noted in order that the proper steps with regard to funeral control, disinfection, etc., can be taken. As already indicated, if infant mortality is to be curtailed, the nurses must get the earliest possible information with regard to births. It is desirable to have the health authorities the guardian of vital statistics of a community. In Pawtucket, the records are filed in the city clerk's office and are well looked after there. It would seem desirable, nevertheless, that they be transferred to the health department for the reasons mentioned above.

PLUMBING INSPECTION.

The plumbing inspection is performed by an inspector appointed independent of the Board of Health. It is generally believed that this work is not a true public health work and consequently I would not suggest any change from the existing conditions.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

The medical inspection of school children is being carried out by the superintendent of health under the direction of the Board of Education. The Board of Health has no control in this matter. There is a marked divergence of opinion to whether or not medical inspection of schools is a function of the health or educational authorities. It seems to make little difference which division of the city government does it, provided it is done well, and that there is the closest kind of coöperation between health and school authorities. I would not advise any change from the present existing plan. Steps should, of course, be taken to stimulate the private and parochial schools to introduce medical inspection. One of the chief functions of medical inspection of schools is the early detection and subsequent isolation of cases of communicable disease. This type of inspection is, of course, necessary in schools of all kinds, public or private.

RECOMMENDATIONS.

It seems evident to me that a city the size and importance of Pawtucket should employ a superintendent of health on full time and supply him with an adequate salary. This superintendent should devote his time entirely to the work of the Health Department.

The sanitary inspection is done entirely by one inspector. This gives the city absolutely inadequate sanitary inspection and there should be at least three full-time sanitary inspectors connected with the health department.

The consideration of the importance of milk in relation to the public health and the magnitude of the milk problem forces me to the conclusion that the city of Pawtucket could well afford to employ a milk inspector on full time, and increase his laboratory facilities so that he would be able to analyze milk for its sanitary qualities in addition to its chemical constituents.

The health work of the city should be centralized under the health department and consequently the work of milk, meat and food inspection, now being done independently of the health department, should be placed under that department. (See Chart II.) This would apparently require the passage of an enabling act such as that which has been passed for Newport.

The prevention of infant mortality, being one of the most important divisions of public health work, naturally falls under the health department. It is becoming a very common thing for health departments to employ public health nurses and, for the reasons given earlier in this report, I would recommend that the work now being done by the Associated Charities through their infant nurse be taken over by the health department, her work enlarged, and that she be paid for by the city.

The necessity for prompt reporting of births by physicians and midwives is evident in connection with the work of visiting nurses. At the present time attendants at births are given until the fifth of the month next succeeding in which to report births. It would seem advisable to take steps to require reporting of births within a shorter period. This would require an amendment to the State law. Five days is allowed in some states but an even shorter period would be desirable. Reporting is less apt to be forgotten if it has to be attended to promptly, and furthermore the nurse is given an opportunity to visit at an early date and thus give advice without dangerous delays.

Tuberculosis, representing such an important cause of death, should consequently receive proper attention. The necessity of the health department, being cognizant of the location of cases of this disease, indicates the desirability of either requiring physicians to report cases of tuberculosis direct to the health authorities or else the passage of an act permitting the

State Board of Health to notify the local health department of all cases reported. Personally, I believe that it would be better to have the physicians report their cases directly to the local authorities and then, if desirable, the local authorities can in turn notify the State Board of Health.

The need for tuberculosis nurses is well recognized and in my opinion the health department should employ educational nurses, to visit and advise the tuberculous persons of the city. I might say that it is also becoming a very common practice for health departments to employ nurses for this purpose.

Believing in the necessity of a thorough disinfection after removal or death of cases of tuberculosis, I would recommend that the health department require that the best possible disinfection be performed after cases of this disease.

Steps should be taken to equip and maintain a modern chemical and bacteriological laboratory for the health department. This laboratory is needed for diagnostic work and for all necessary work in connection with milk and food inspection.

The need for a very close co-operation between the Board of Health and the office of the City Solicitor is evident. A great deal of the work of the former is of a police nature and efficient co-operation on the part of the legal authorities is of the greatest value in enforcing the Board of Health ordinances and rules.

Believing that the health authorities are more intimately interested and related to the vital statistics of the community than any other city department, it would seem wise to me to transfer the care of vital statistics to the Board of Health from the office of the city clerk. The superintendent of health would serve as registrar of vital statistics.

The rules of the Board of Health, should be thoroughly revised and added to so that the health standards of Pawtucket would be placed on a higher plane.

If the above recommendations are carried out, it will mean, of course, added expense to the community for its public health work. However, it is evident that at the present time Pawtucket is spending on health work very much less than it should and, if all the above recommendations were adopted, even then the expenses per capita to Pawtucket would by no means be unusual or excessive. The tentative cost of such a revision of the health department would be as follows:

Health officer	\$3,000.00
Three sanitary inspectors at \$1,000	3,000.00
One milk inspector	1,500.00
One meat inspector	500.00
Two nurses at \$800	1,600.00

Public Health Activities

One clerk.....	\$600.00
Miscellaneous expenses (equipment, and maintain- ing laboratory, printing, supplies, disinfectants, vaccines, serums, etc.).....	5,000.00
	<hr/>
Total.....	\$15,200.00

Even with this budget the expense to the city would be less than thirty cents per capita, a small sum to pay for health conservation.

Respectfully submitted,

SELSKAR M. GUNN.

APPENDIX.

DEATH-RATE PER 1,000.

	PAWTUCKET.	RHODE ISLAND.	REGISTRATION CITIES.
1900	19.83	20.46	18.57
1901	16.57	18.13	17.32
1902	18.02	17.71	16.87
1903	15.87	18.80	16.95
1904	16.00	17.24	17.33
1905	16.71	17.10	16.65
1906	15.88	17.38	16.87
1907	17.93	17.78	17.12
1908	14.96	15.92	15.72
1909	15.1	15.57	15.42
1910	15.89	17.07	15.9
1911	15.47	15.54	15.33

DEATH-RATE PER 100,000.

RHODE ISLAND.

	Typhoid fever.	Measles.	Scarlet fever.	Whooping- cough.	Diphtheria and croup.	Tuberculosis of lungs.	Other forms of tuberculosis.	Pneumonia (lobar and unqualified).
1900	28.7	42.9	7.7	16.6	46.0	196.9	34.1	158.0
1901	23.5	3.6	4.8	3.9	44.2	192.1	30.1	129.2
1902	20.3	5.1	6.2	17.6	35.4	178.8	30.5	119.1
1903	17.6	30.0	12.8	34.6	42.9	189.6	36.1	138.4
1904	14.9	3.4	14.9	1.7	30.9	170.5	38.7	136.9
1905	17.1	7.5	7.1	9.6	28.7	175.6	38.3	152.7
1906	16.4	24.7	16.2	18.8	25.5	165.0	35.8	140.5
1907	10.9	6.1	28.0	16.8	24.5	161.6	36.9	138.9
1908	12.7	15.6	6.9	6.2	29.1	167.8	35.2	117.6
1909	12.0	11.5	5.8	10.7	19.5	150.1	28.0	111.0
1910	13.6	....	4.0	....	24.6	156.8	25.2	189.6
1911	9.5	4.1	10.4	21.7	25.6	145.1	25.8	152.1

Public Health Activities

PAWTUCKET.

	Typhoid fever.	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria and croup.	Tuberculosis of lungs.	Other forms of tuberculosis.	Pneumonia (lobar and unqualified).
1900	22.9	33.1	10.2	10.2	53.5	158.1	35.7	124.9
1901	12.5	2.5	2.5	....	57.4	167.2	17.5	144.8
1902	24.5	9.8	4.9	22.0	31.8	163.9	19.6	110.0
1903	19.2	7.2	4.8	21.6	28.8	167.8	12.0	98.3
1904	23.5	2.4	18.8	....	25.9	148.1	28.2	108.1
1905	6.9	9.2	11.5	13.8	23.1	172.9	25.4	166.0
1906	8.8	11.1	....	11.1	35.4	128.3	33.2	121.6
1907	14.9	2.1	6.4	6.4	14.9	166.3	49.0	140.7
1908	2.1	4.1	4.1	2.1	16.5	150.2	30.9	105.0
1909	9.9	6.0	9.9	19.9	15.9	115.3	27.8	105.4
1910	7.7	....	....	....	13.5	138.5	19.3	178.9
1911	3.7	5.6	5.6	24.2	37.3	128.6	29.8	137.9

REGISTRATION CITIES.

	Typhoid fever.	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria and croup.	Tuberculosis of lungs.	Other forms of tuberculosis.	Pneumonia (lobar and unqualified).
1900	36.5	13.8	11.6	13.1	50.5	198.8	23.0	177.9
1901	33.7	7.4	15.4	10.5	39.1	191.2	24.3	142.9
1902	37.2	11.0	15.2	13.0	36.3	179.3	23.8	137.3
1903	37.8	11.2	14.1	17.2	37.2	182.1	25.6	135.5
1904	34.7	11.6	12.3	6.9	32.5	193.5	26.6	149.2
1905	29.6	8.4	7.5	11.6	26.9	181.9	27.5	122.9
1906	33.5	13.7	9.2	15.0	29.3	177.7	27.9	121.5
1907	32.0	11.3	12.5	11.0	26.8	174.5	27.3	131.2
1908	25.0	11.2	14.6	10.2	24.7	164.6	26.5	105.4
1909	21.2	11.1	13.6	9.3	24.2	157.6	26.1	107.7
1910	22.4	....	14.2	....	25.7	155.5	23.2	171.0
1911	20.0	10.2	11.2	10.9	21.9	154.0	24.5	157.5

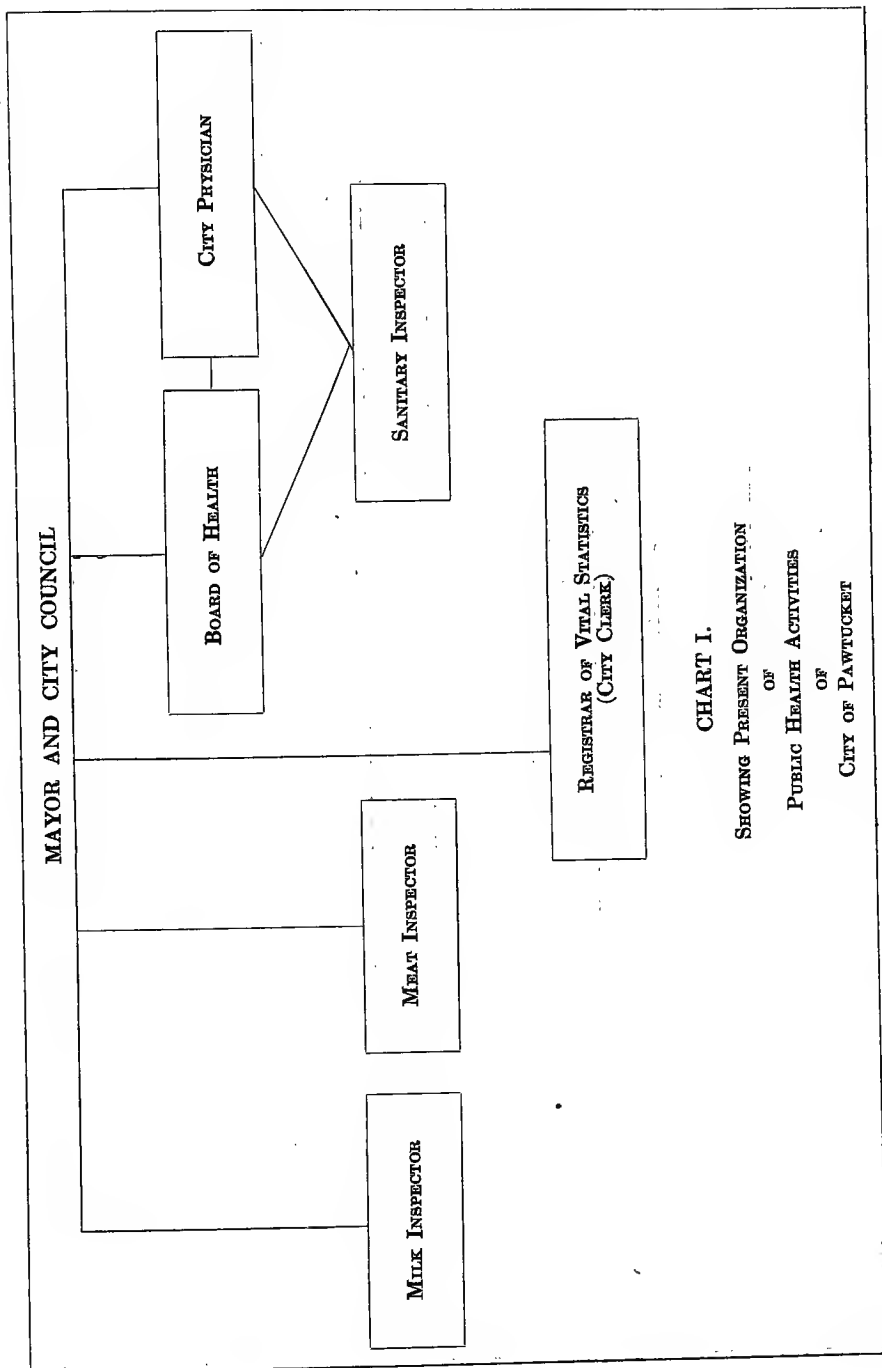


CHART I.
SHOWING PRESENT ORGANIZATION
OF
PUBLIC HEALTH ACTIVITIES
OF
CITY OF PAWTUCKET

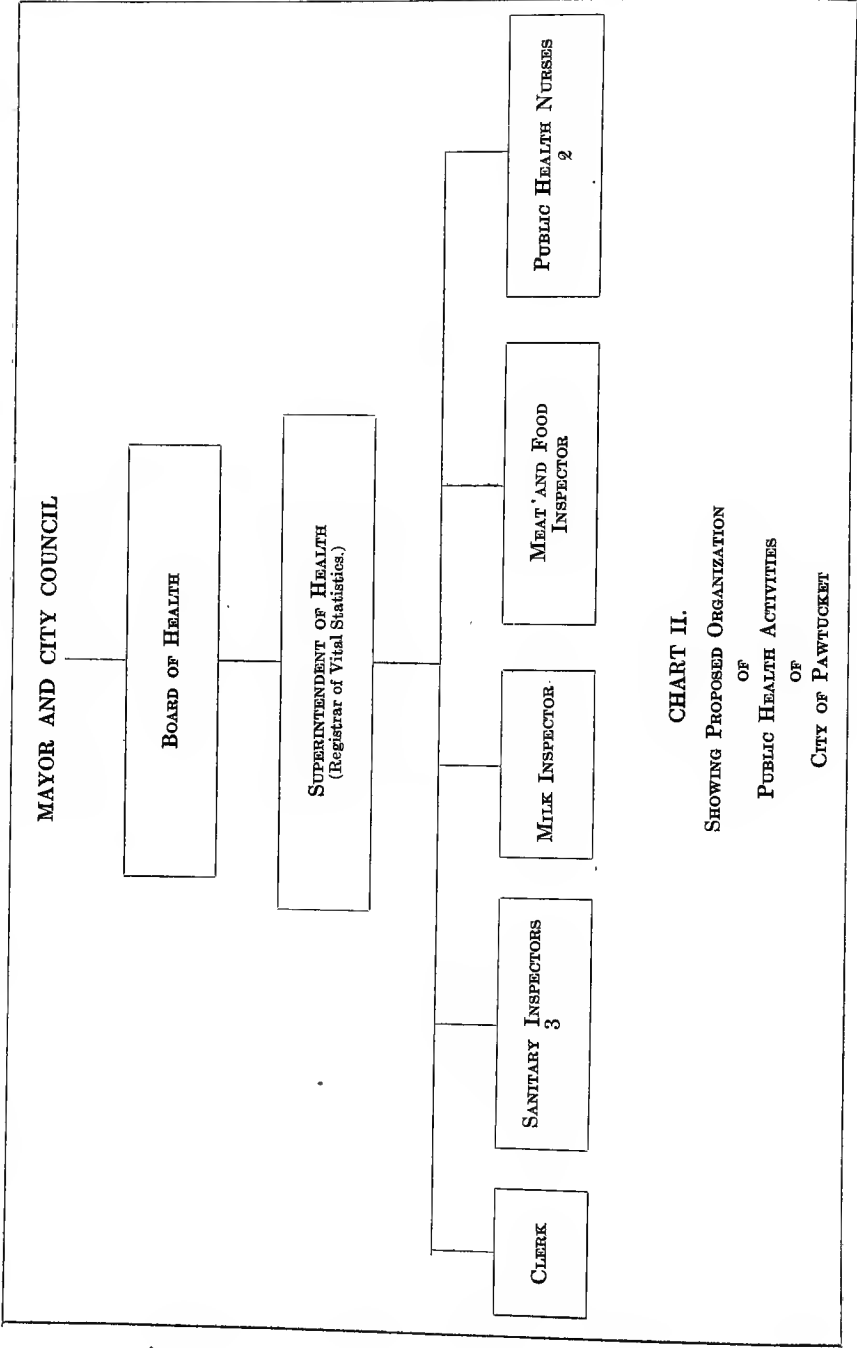


CHART II.
SHOWING PROPOSED ORGANIZATION
OF
PUBLIC HEALTH ACTIVITIES
OF
CITY OF PAWTUCKET

